179020 RSPA-97-3170-11

Wong, Kin

DEPT OF TRANSPORTATION DOCKETS

02 JUL 10 PM 3:10

From: Davis Tonita L Civ HQ AFMC/LG [Tonita.Davis@wpafb.af.mil]
Sent: Wednesday, February 27, 2002 1:22 PM
To: 'Kin Wong'; 'Shareef Jameelah'
Cc: Posten Ryan
Subject: RE: Renewal of E-11989-Part 3

8721.pdf

Kin,

As requested, USADACS Drawing 19-48-8721-SP15M15 is attached to this email. This is the final drawing.

Tonita Davis

-----Original Message-----
From: Kin Wong [mailto:Kin.Wong@RSPA.dot.gov]
Sent: Tuesday, February 26, 2002 11:42 AM
To: 'Shareef Jameelah'
Cc: 'Davis Tonita'; Posten Ryan
Subject: Renewal of E-11989

Jameelah:

The above exemption is still waiting to be signed. In the mean time can you send us copies of the drawings mentioned in the application of August 3, 2001?

USADACS Drawing 19-48-8720-SP15M14
USADACS Drawing 19-48-8719-SP15M13
USADACS Drawing 19-48-8721-SP15M15

We found out that they did not accompany the application letter. Thanks.

Kin

APPROVED BY
BUREAU OF EXPLOSIVES

DATE 06/03/01

LOADING AND BRACING• IN SIDE OPENING ISO CONTAINERS OF 2,000 POUND GUIDED BOMB UNITS (GBU-27/BLU-109/B), COMPLETE ROUND

INDEX

• LOADING AND BRACING SPECIFICATIONS SET FORTH WITHIN THIS DRAWING ARE APPLICABLE TO LOADS THAT ARE TO BE SHIPPED BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC) RAIL CARRIER SERVICE. THESE SPECIFICATIONS MAY ALSO BE USED FOR LOADS THAT ARE TO BE MOVED BY MOTOR OR WATER CARRIERS.

U.S. ARMY MATERIEL COMMAND DRAWING

APPROVED, U.S. ARMY OPERATIONS SUPPORT COMMAND

Timothy R. Fore

APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND

U.S. ARMY DEFENSE AMMUNITION CENTER

ENGINEER	BASIC		
	REV.		
TECHNICIAN	BASIC	PATRICK DOUGHERTY	
	REV.		
DRAFTSMAN	BASIC		
	REV.		
TRANSPORTATION ENGINEERING DIVISION			
VALIDATION ENGINEERING DIVISION			
ENGINEERING DIRECTORATE			

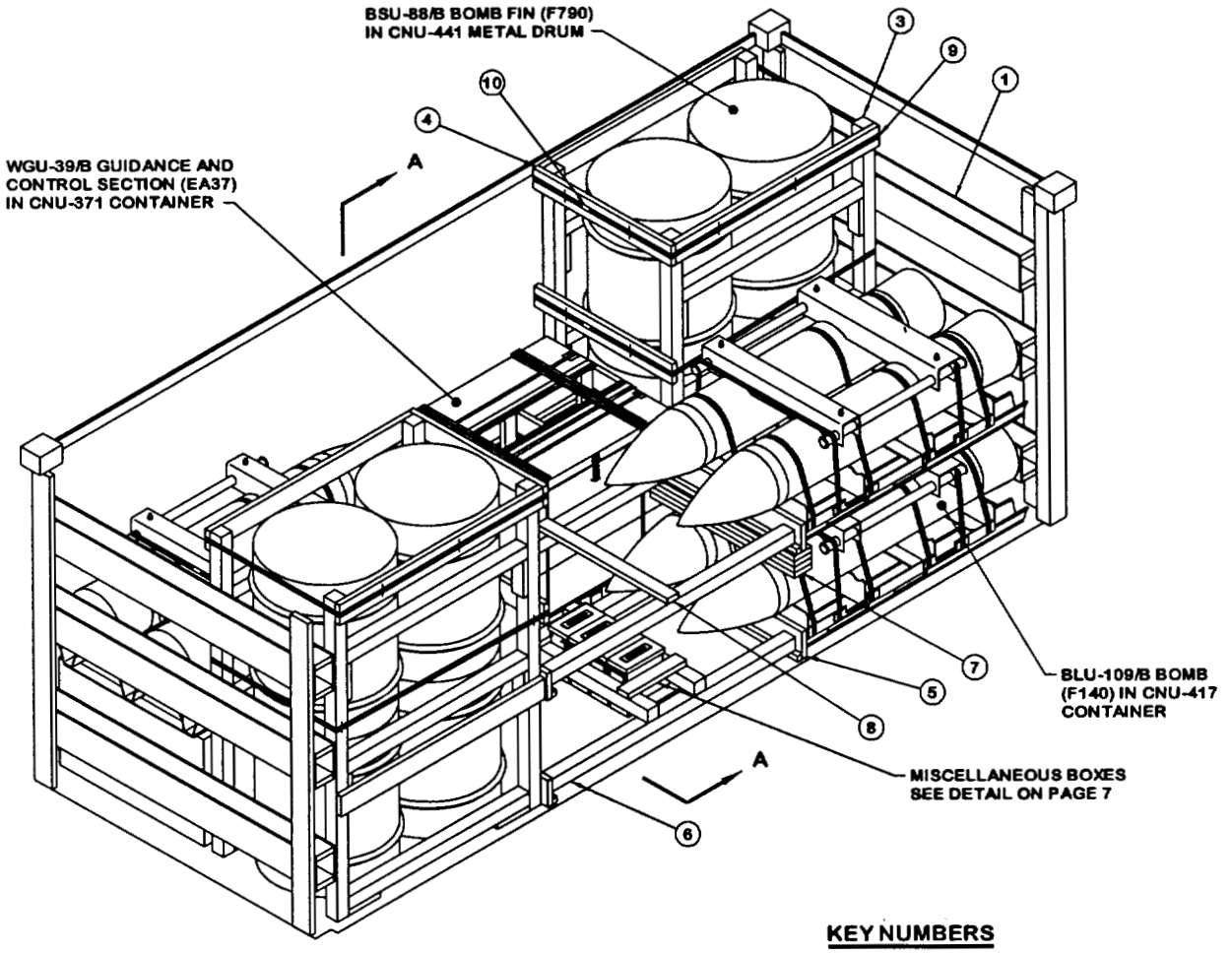
DO NOT SCALE

WEBSITE: HTTP://WWW.DAC.ARMY.MIL

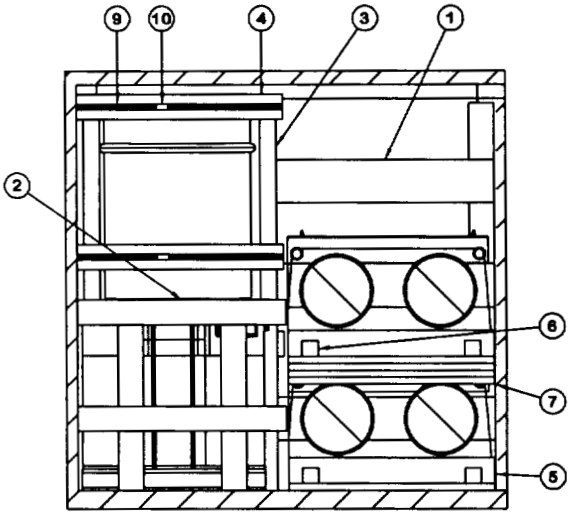
MAY 2001

CLASS	DIVISION	DRAWING	FILE
19	48	8721	SP15M15

PROJECT SP 420-01



ISOMETRIC VIEW



SECTION A-A

KEY NUMBERS

(1) END BLOCKING ASSEMBLY (2 REQD). SEE END BLOCKING ASSEMBLY DETAIL ON PAGE 5.

(2) CENTER GATE A (1 REQD). SEE DETAIL ON PAGE 6.

(3) DRUM RESTRAINT ASSEMBLY (4 REQD). SEE DETAIL ON PAGE 6. POSITION ON EITHER SIDE OF EACH STACK OF FOUR DRUMS.

(4) TIE PIECE, 2" X 6" BY LENGTH TO SUIT (REF: 43") (4 REQD). NAIL TO THE DRUM RESTRAINT ASSEMBLIES W/3-10d NAILS AT EACH LOCATION AS SHOWN.

(5) CENTER GATE B (4 REQD). SEE DETAIL ON PAGE 7. POSITION AT THE BASE OF THE BOMB PALLET UNITS ON THE DOOR SIDE AND AGAINST THE DRUM RESTRAINT ASSEMBLIES ON THE DOOR SIDE. THE GATES OPPOSITE EACH OTHER SHALL BE LEVEL. NAIL THE GATES TO THE DRUM RESTRAINT ASSEMBLIES W/2-10d NAILS AT EACH LOCATION. ONE CENTER GATE WILL BE TOENAILED TO THE SOLID FILL, PIECE NUMBER (7) W/4-10d NAILS.

(6) STRUT, 4" X 4" BY CUT TO FIT (REF: 78-1/2") (4 REQD). POSITION BETWEEN CENTER GATES B. TOENAIL TO THE CENTER GATES W/2-12d NAILS AT EACH END. SEE THE "BEVEL CUT " DETAIL ON PAGE 7.

(7) SOLID FILL, 2" X 6" X 45" AS REQUIRED TO FILL VOID BETWEEN THE TOP OF THE BOMBS IN THE BOTTOM LAYER AND THE BASE OF THE TOP BOMB PALLET UNIT ON THE DOOR SIDE. LAMINATE THE SECOND PIECE TO THE FIRST PIECE W/4-10d NAILS. LAMINATE ADDITIONAL PIECES IN A SIMILAR MANNER.

(8) STRUT BRACING, 2" X 4" BY LENGTH TO SUIT (REF; 41") (1 REQD). CENTER ON THE UPPER TWO STRUTS AND NAIL W/2-10d NAILS AT EACH END.

(9) STEEL STRAPPING, 1-1/4" X .035" OR .031" X 19'-1" LONG STEEL STRAPPING (4 REQD). PRE-POSITION STRAPPING ON THE DRUM RESTRAINT ASSEMBLY AGAINST THE FAR WALL AND STAPLE TO THE HORIZONTAL PIECE OR THE POST W/2 STAPLES ON EACH SIDE.

(10) SEAL FOR 1-1/4" STRAPPING, (4 REQD). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.

PROJECT SP 420-01

(GENERAL NOTES CONTINUED)

J. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM AND ONE POUND EQUALS 0.454 KG.

K. MAXIMUM LOAD WEIGHT CRITERIA:

THE MAXIMUM LOAD WEIGHTS ARE CONTROLLED BY EQUIPMENT CAPABILITY FACTORS. ALTHOUGH THE HEAVIEST MAXIMUM LOADS ARE DELINEATED IN THE LOAD VIEWS, PROVISIONS ARE INCLUDED WITHIN THIS DRAWING SO THAT THE BASIC LOADS CAN BE ADJUSTED TO SATISFY A LESSER QUANTITY OF LADING UNITS. DEPENDING ON TRANSPORTATION ROUTING, IT MAY BE NECESSARY TO REDUCE THE LOAD WEIGHT TO SATISFY "WEIGHT LAWS" OF CERTAIN STATES. ALSO, IT MAY BE NECESSARY TO REDUCE THE LOAD WEIGHT TO SATISFY OTHER WEIGHT RESTRICTIONS IMPOSED ON THE INTERMODAL CONTAINER SYSTEM.

L. REQUIREMENTS CITED WITHIN THE ASSOCIATION OF AMERICAN RAILROADS (AAR) INTERMODAL LOADING GUIDE APPLY WHEN THE SHIPMENT MOVES BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC). SPECIAL T/COFC NOTES FOLLOW:

1. A LOADED CONTAINER MUST BE ON A CHASSIS EQUIPPED WITH TWO BOGIE ASSEMBLIES WHEN BEING MOVED IN TOFC SERVICE.

2. THE LOAD LIMIT OF A T/COFC RAILCAR MUST NOT BE EXCEEDED, NOR WILL A CAR BE LOADED SO THAT THE TRUCK UNDER ONE END OF THE CAR CARRIES MORE THAN ONE-HALF OF THE LOAD LIMIT FOR THAT CAR.

M. DURING INTRASTATE AND/OR INTERSTATE MOVES BY MOTOR CARRIER, A PROPER CHASSIS OR MODIFIED FLATBED TRAILER MUST BE USED TO PRECLUDE VIOLATION OF ONE OR MORE "WEIGHT LAWS" APPLICABLE TO THE STATE OR STATES INVOLVED.

N. WHETHER A CONTAINER IS FULL OR IS LOADED WITH A REDUCED QUANTITY OF LADING UNITS, THE LENGTHWISE CENTER OF GRAVITY OF THE LOAD MUST BE WITHIN 12", IN EITHER DIRECTION, OF THE MID-POINT OF THE CONTAINER.

O. ANTI-CHAFING MATERIAL, CONSISTING OF NEUTRAL BARRIER MATERIAL, PLYWOOD, OR HARDBOARD, MAY BE INSTALLED AT POINTS OF CONTACT BETWEEN THE LADING AND THE SIDE OPENING CONTAINER TO PREVENT CHAFING DAMAGE TO CONTAINER PAINT AND MARKINGS.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
BLU-109/B BOMB PALLET UNIT	4	17,880 LBS
CNU 371 CONTAINER WITH WGU-39/B	8	1,289 LBS
CNU-441 DRUM WITH BSU-88/B	8	2,288 LBS
F809 BOX	4	84 LBS
CY52 BOX	1	6 LBS
DUNNAGE		990 LBS
CONTAINER		6,050 LBS
TOTAL WEIGHT		28,587 LBS (APPROX)

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	15	5
2" X 4"	56	38
2" X 6"	182	182
2" X 8"	15	20
4" X 4"	148	198
NAILS	NO. REQD	POUNDS
6d (2")	264	1-3/4
10d (3")	284	4-1/2
12d (3-1/4")	64	1-1/4

GENERAL NOTES

A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).

B. THE OUTLOADING PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO LOADS OF 2,000 LB, GBU-27 (BLU-109/B) BOMBS AND ASSOCIATED COMPONENTS IN A SIDE OPENING CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS THE CONTAINERS WITH THE GBU-27 COMPONENTS. SEE PAGES 4 AND 5 FOR DETAILS OF THE COMPONENTS. CAUTION: REGARDLESS OF THE QUANTITY OF UNITS TO BE SHIPPED, THE "MAXIMUM GROSS WEIGHT" OF THE SIDE OPENING ISO CONTAINER MUST NOT BE EXCEEDED.

C. THE LOAD AS SHOWN IS BASED ON 6,050 POUND 20' LONG BY 8' WIDE BY 8'-6" HIGH SIDE OPENING ISO CONTAINER WITH INSIDE DIMENSIONS OF 19'-4" LONG BY 89" WIDE BY 88" HIGH AND A MAXIMUM GROSS WEIGHT OF 52,910 POUNDS. THE LOAD IS DESIGNED FOR TRAILER/CONTAINER-ON-FLATCAR (T/COFC) SHIPMENT, HOWEVER, THE LOAD AS DESIGNED CAN ALSO BE MOVED BY MOTOR OR WATER CARRIERS. NOTICE: OTHER CONTAINERS OF THE SAME DESIGN CONFIGURATION CAN ALSO BE USED.

D. WHEN LOADING THE UNITS, THEY ARE TO BE POSITIONED SO AS TO ACHIEVE A TIGHT LOAD (TIGHT AGAINST THE DUNNAGE ASSEMBLIES). THE UNBLOCKED SPACE ACROSS THE WIDTH OF A LOAD BAY IS NOT TO EXCEED 1-1/2". EXCESSIVE SLACK CAN BE ELIMINATED FROM A LOAD BY LAMINATING ADDITIONAL PIECES OF APPROPRIATE THICKNESS TO THE DRUM RESTRAINT ASSEMBLIES. NAIL EACH ADDITIONAL PIECE TO THE HORIZONTAL PIECE W/I APPROPRIATELY SIZED NAIL EVERY 12". ADDITIONALLY, THE THICKNESS AND QUANTITY OF THE DUNNAGE LUMBER USED MAY BE ADJUSTED AS REQUIRED TO FACILITATE VARIANCE IN THE SIZE OF THE CONTAINER.

E. DUNNAGE LUMBER SPECIFIED IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY 5-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.

F. A STAGGERED NAILING PATTERN WILL BE USED WHENEVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES OR WHEN LAMINATING DUNNAGE. ADDITIONALLY, THE NAILING PATTERN FOR AN UPPER PIECE OF LAMINATED DUNNAGE WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL FOR THAT PIECE WILL NOT BE DRIVEN THROUGH ONTO OR RIGHT BESIDE A NAIL IN A LOWER PIECE.

G. IN SOME CONTAINERS THERE IS A SLOT AT THE CORNERS OF THE ENDWALLS. PIECES OF DUNNAGE MATERIAL MUST BE LAMINATED TO THE BUFFER PIECES ON THE END BLOCKING ASSEMBLIES TO PROVIDE A FLAT SURFACE FOR THE BUFFER PIECES. A PIECE OF 2" X 4", 2" X 3" OR A SPECIAL WIDTH PIECE CUT-TO-FIT CAN BE USED. THIS FILL PIECE WILL BE NAILED WITH ONE APPROPRIATELY SIZED NAIL EVERY 12". NOTE THAT SOME CONTAINERS ARE EQUIPPED WITH "TIE-BARS" IN THE CORNER SLOT, WHICH PRECLUDE THE USE OF A FULL HEIGHT FILL PIECE. WHEN "TIE-BARS" ARE PRESENT, THE FILL PIECE MUST BE INSTALLED IN SEGMENTS DESIGNED TO FIT BETWEEN THE "TIE-BARS" VERTICALLY. THE FILL PIECE(S) IS NOT REQUIRED WHEN THE CORNER PORTIONS OF THE CONTAINER ENDWALLS ARE SMOOTH AND FLAT. DO NOT ALLOW ANY DUNNAGE ASSEMBLY TO CONTACT THE CONTAINER ENDWALLS, ONLY THE CORNER POSTS OF THE CONTAINER SHOULD BE USED FOR LONGITUDINAL BLOCKING.

H. CAUTION: DO NOT NAIL DUNNAGE MATERIAL TO THE CONTAINER WALLS OR FLOOR. ALL NAILING WILL BE WITHIN THE DUNNAGE. PORTIONS OF THE CONTAINER DEPICTED WITHIN THIS DRAWING, SUCH AS THE SIDE DOORS, HAVE NOT BEEN SHOWN IN THE LOAD VIEW FOR CLARITY PURPOSES.

(CONTINUED AT LEFT)

MATERIAL SPECIFICATIONS

LUMBER: SEE TM 743-200-1 (DUNNAGE LUMBER) AND VOLUNTARY PRODUCT STANDARD PS 20.

NAILS: ASTM F1667; COMMON STEEL NAIL (NLCMS OR NLCMMS).

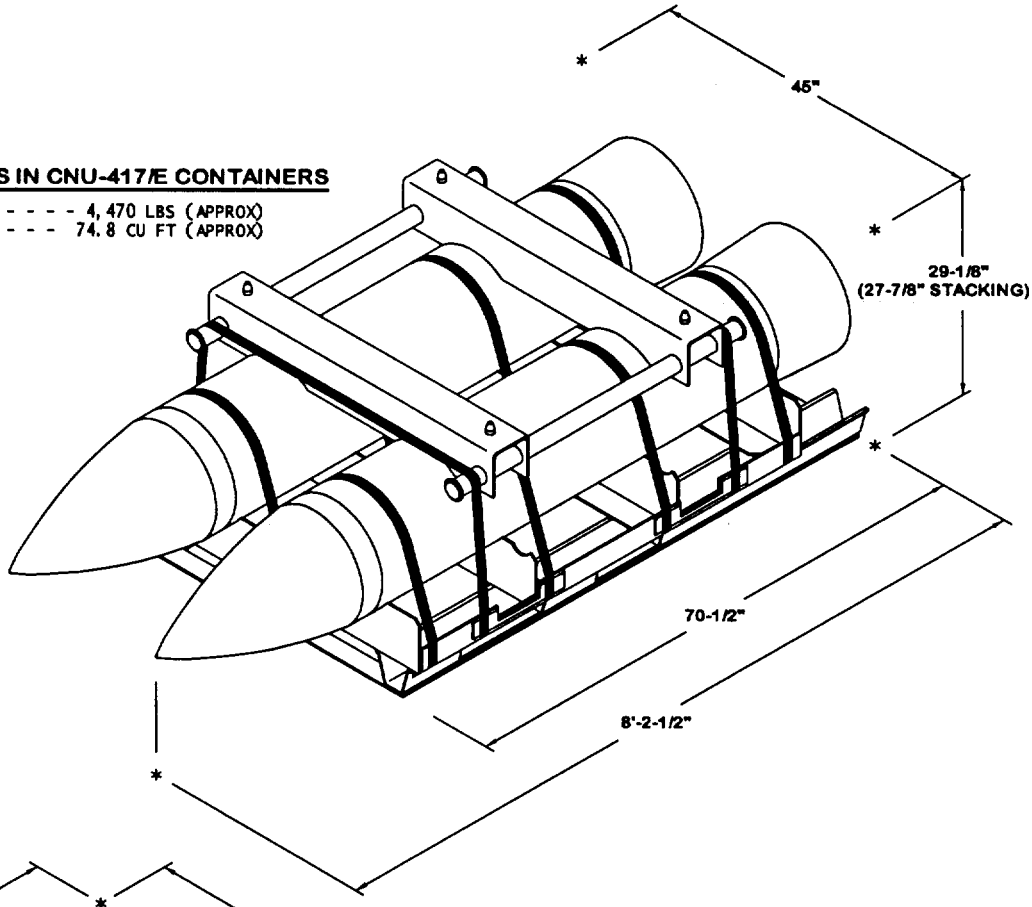
PLYWOOD: COMMERCIAL ITEM DESCRIPTION A-A-55057, INDUSTRIAL PLYWOOD, INTERIOR WITH EXTERIOR GLUE, GRADE C-D. IF SPECIFIED GRADE IS NOT AVAILABLE, A BETTER INTERIOR OR AN EXTERIOR GRADE MAY BE SUBSTITUTED.

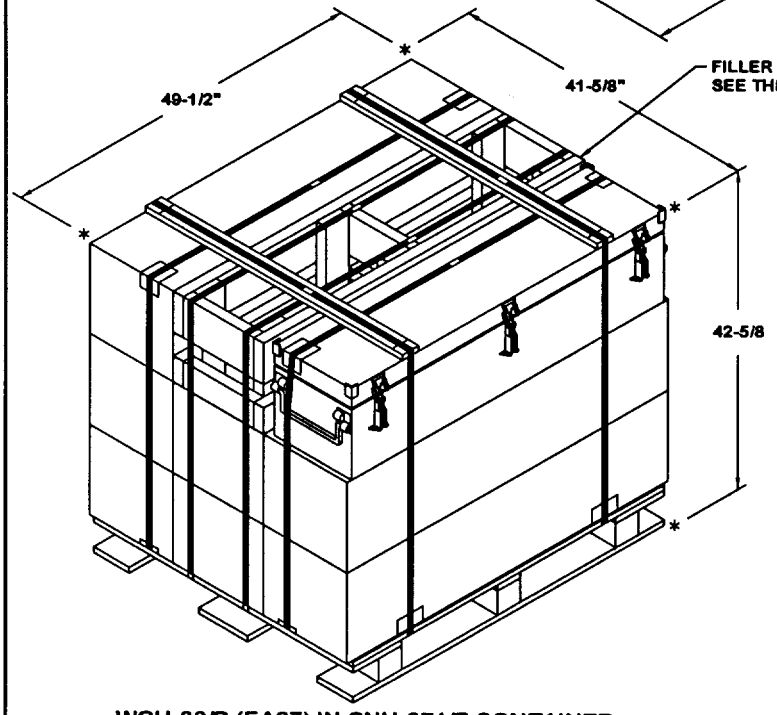
ANTI-CHAFING MATERIAL: MIL-B-121 (OR EQUAL); NEUTRAL BARRIER MATERIAL.

HARDBOARD: ANSI/AHA A135.4, CLASS 1.

BLU-109/B (F140) BOMBS IN CNU-417/E CONTAINERS

GROSS WEIGHT - - - - - - - - - 4,470 LBS (APPROX)
CUBE - - - - - - - - - - - - - 74.8 CU FT (APPROX)

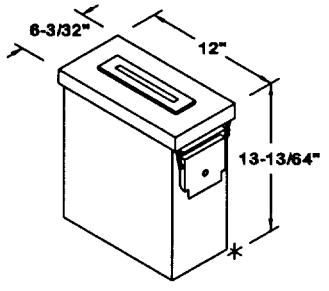




WGU-39/B (EA27) IN CNU-371/E CONTAINER

PALLETIZE IAW U.S. AIR FORCE DRAWING 817371, ELIMINATING ONE CNU-371/E CONTAINER AND ADDING ONE FILLER ASSEMBLY AS DEPICTED ON PAGE 8.

8 BOXES OF WGU-39/B (1 PER CONTAINER) AT 144 LBS	1,152 LBS (APPROX)
FILLER ASSEMBLY	45 LBS
DUNNAGE	12 LBS
PALLET	80 LBS
TOTAL WEIGHT	1,289 LBS (APPROX)
CUBE	50.9 CU FT (APPROX)



FMU-143B/B (F809) IN PA60 METAL BOX

GROSS WEIGHT - - - - - - - - - 21 LBS (APPROX)
CUBE - - - - - - - - - - - - 0.6 CUBIC FEET (APPROX)

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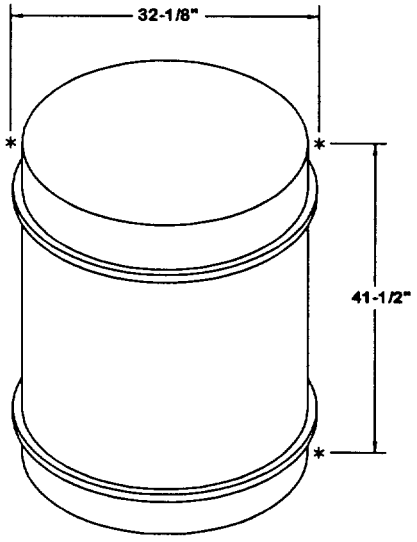
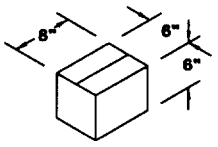


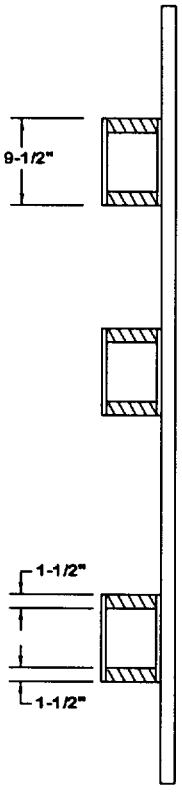
BSU-88/B FIN ASSEMBLY (F790) IN CNU-441 CONTAINER

GROSS WEIGHT - - - - - - - - - - - - 286 LBS (APPROX)
CUBE - - - - - - - - - - - - - 19.5 CUBIC FEET (APPROX)

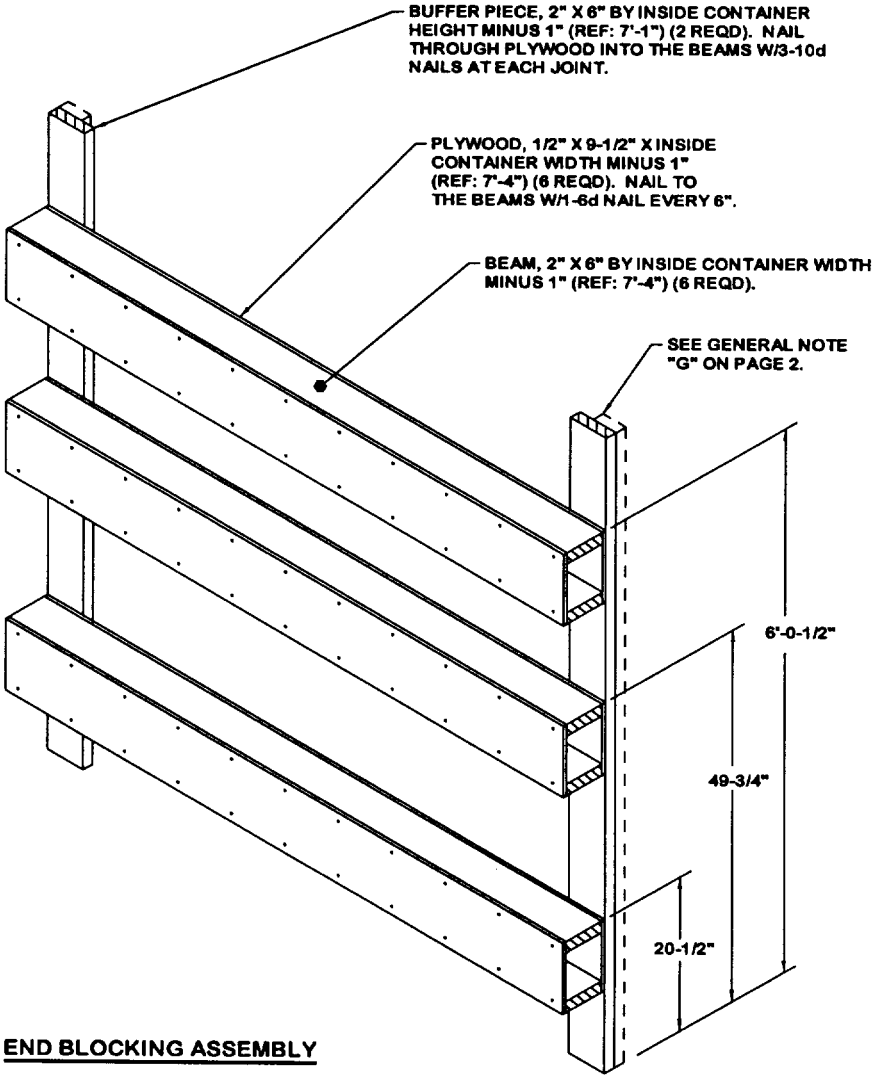


SWIVEL AND LOOP ASSEMBLY (CY52) IN FIBERBOARD BOX

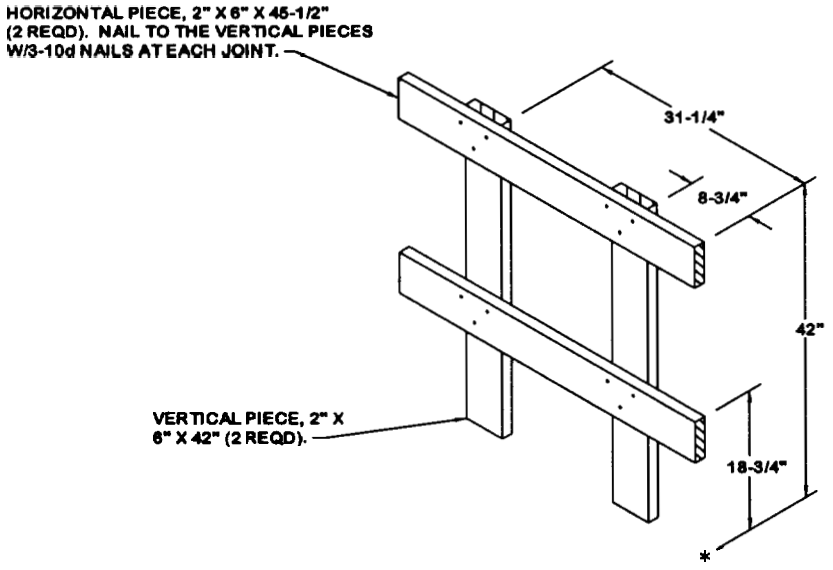
GROSS WEIGHT - - - - - - - - - - - - 6 LBS (APPROX)
CUBE - - - - - - - - - - - - - 0.17 CUBIC FEET (APPROX)



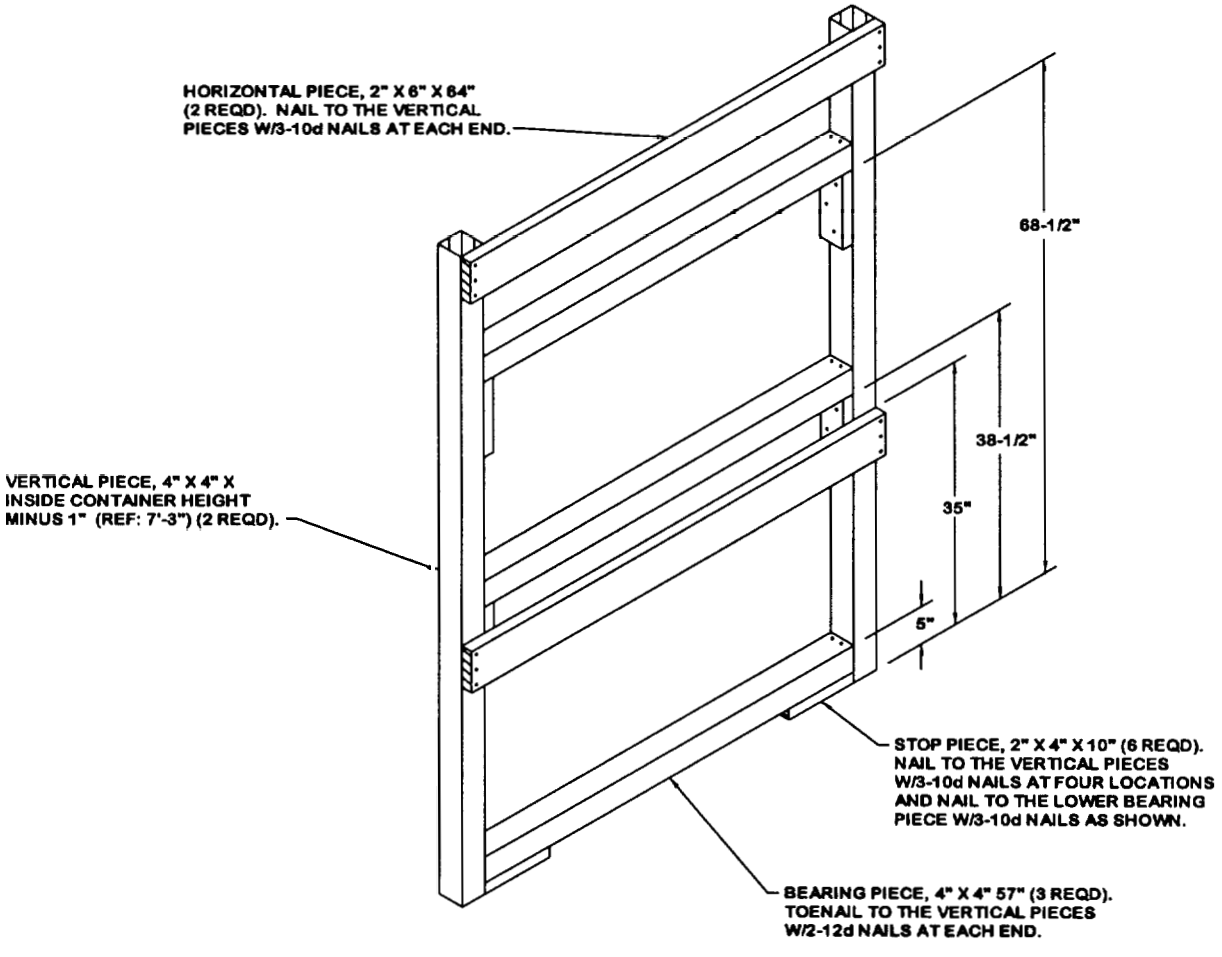
VIEW A



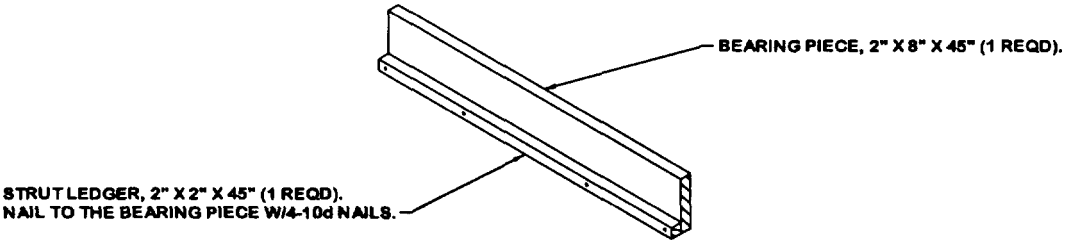
END BLOCKING ASSEMBLY



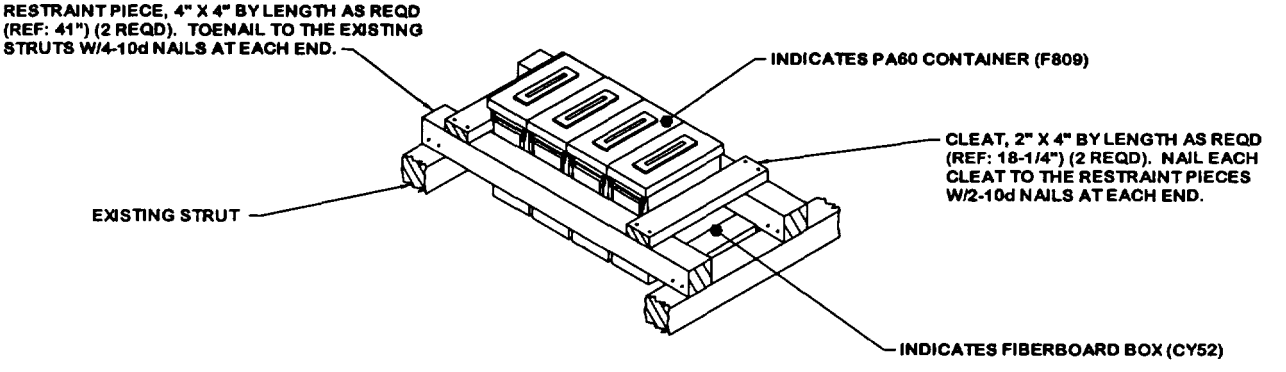
CENTER GATE A



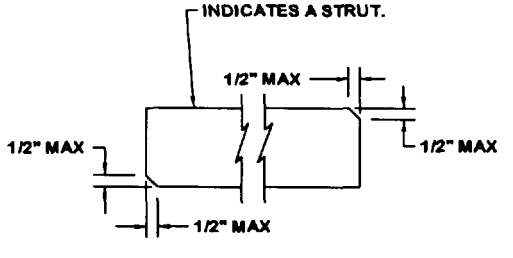
DRUM RESTRAINT ASSEMBLY



CENTER GATE B

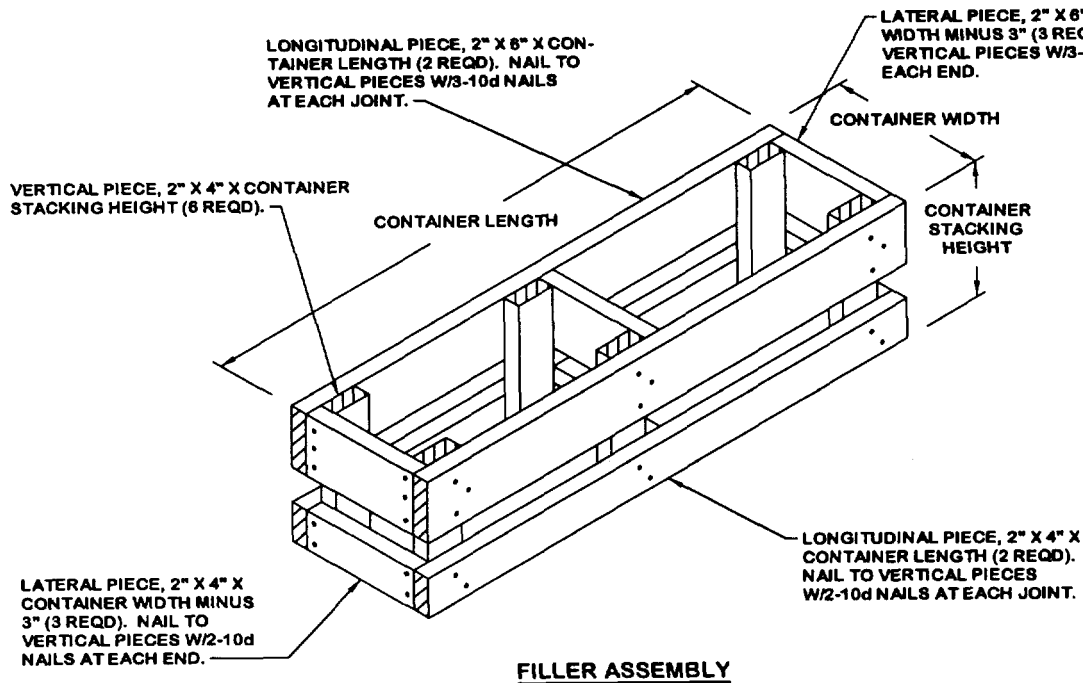


SECUREMENT OF MISCELLANEOUS BOXES



BEVEL-CUT

IF DESIRED, EACH END OF A STRUT MAY BE BEVEL-CUT AS SHOWN ABOVE TO FACILITATE THE ACHIEVEMENT OF A TIGHT CENTER-GATE-TO-CENTER-GATE FIT.



FILLER ASSEMBLY

NOTE: THE ABOVE ASSEMBLY IS FOR USE WITH THE CNU-371/E PALLET UNIT. REFERENCES TO "CONTAINER" ABOVE IS TO THE CNU-371/E CONTAINER. CONTAINER STACKING HEIGHT IS 3/8" LESS THAN THE TOTAL CONTAINER HEIGHT (REF: 12-1/8").